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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/780,675	02/19/2004	Ryoichi Fukumoto	000409-093	1991
21839	7590	06/26/2006	EXAMINER	
BUCHANAN INGERSOLL PC (INCLUDING BURNS, DOANE, SWECKER & MATHIS) POST OFFICE BOX 1404 ALEXANDRIA, VA 22313-1404			REDMAN, JERRY E	
			ART UNIT	PAPER NUMBER
			3634	

DATE MAILED: 06/26/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/780,675

Applicant(s)

FUKUMOTO ET AL.

Examiner

Jerry Redman

Art Unit

3634

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 06 April 2006.  
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-12 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 1-12 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.  
10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All b) ☐ Some \* c) ☐ None of:  
1. ☒ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 7/9/04 & 1/5/05.  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.  
5) ☐ Notice of Informal Patent Application (PTO-152)  
6) ☐ Other: \_\_\_\_\_.

The restriction requirement dated 3/6/2006 is hereby withdrawn as all of the claims are directed towards a single species and therefore claims 1-12 read on the elected species

Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

The applicant's information disclosure statements dated 7/9/2004 and 1/5/2005 have been considered and a copy has been placed in the file.

Claims 1-12 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. In claim 1, lines 2-3, the phraseology "a wire winding pulley provided at a step panel positioned at under part of a vehicle" is not readily understood by the Examiner. In claims 11 and 12, line 2, there is a lack of antecedent basis for "the vehicle outer side". In claim 1, line 7, it appears that ~~the~~ or ~~said~~ should be inserted after "to".

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:


(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

As best understood, claims are further rejected under 35 U.S.C. 103(a) as being unpatentable over DeLand et al. ('591) in view of Shibata et al. (5,505,022). DeLand et al. ('591) discloses a slide door opening and closing for vehicles (10) having a slide door (12) comprising a wire winding pulley (238B), a motor (202M), a driven pulley (138), a lower roller supporting member (26, Figure 7) having a bracket attached to the slide door (12), a wire wound (41B, 42B) on said each pulley (138 and 238), wherein each wire (41B, 42B) being fixed to the wire winding pulley (238B) and the other end of each wire (41B, 42B) is attached to the lower roller supporting member (26). DeLand et al. ('591) further discloses a front pulley (23), a rear pulley (138), and an idler pulley (152) provided between the front pulley (23) and the rear pulley (138) in the vicinity of a curved line path. DeLand et al. ('591) fail to disclose a housing and spring. Shibata et al. ('022) disclose a housing (46, 62, and 66) mounted to a bracket (52) and a spring (60) contained within the housing. It would have been obvious to one of ordinary skill in the art at the time of the invention to provide the assembly of DeLand et al. ('591) with a tension spring contained within a housing as taught by Shibata et al. ('022) since the springs allows the cables to be tensioned and the housing protects the elements from the weather.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. U.S. patent to U.S. patent to Medebach discloses a spring tensioning system similar to that of the applicant's invention. U.S. patents to Stone et

al. Kuhlman et al., and Azuma disclose cable drive assemblies similar to that of the applicant's invention.

Any inquiry concerning this communication should be directed to Jerry Redman at telephone number 571-272-6835.



**Jerry Redman**  
**Primary Examiner**